

**WIRELESS TERMINALS AND METHODS FOR COMMUNICATING OVER
CELLULAR AND ENHANCED MODE BLUETOOTH
COMMUNICATION LINKS**

ABSTRACT OF THE DISCLOSURE

A wireless terminal includes a Bluetooth module that communicates first
5 information with a remote Bluetooth device, and a processor that selectively encodes
the first information based on whether the remote Bluetooth device supports the
enhanced communication mode. The wireless terminal can include a cellular
transceiver that communicates second information with a cellular network according
to a cellular communication protocol. In the enhanced communication mode, the
10 processor may use one or more signal processing operations to encode the first
information for transmission to the remote Bluetooth device that are also used to
encode the second information for transmission to the cellular network.